

Public Comment on Exhibits for proposed changes to the National Electrical Code (NFPA 70, 2020)

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NEMA

To:

NEW HAMPSHIRE STATE BUILDING CODE REVIEW BOARD

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I will speak to the following exhibits submitted by the electrical sub-committee

To keep things brief for the sake of time, I would offer the Board any documentation to support my claims in these submittals to the exhibits if they need more information.

Exhibit #	2020 NEC Section	Exhibit #
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20-02-21		210.8(A)				
20-03-21		210.8(B)		20-11-21		314.27

20-04-21		210.8(E)		20-13-21		406.12
20-05-21		210.8(F)		20-14-21		422.5
20-06-21		210.12		20-15-21		422.16
20-07-21		210.52 (C)**				
20-08-21		210.63		20-17-21		450.9
20-09-21		230.67		20-18-21		680.4

20-02-19

Section 210.8(A)

This new section revision addresses an expansion of GFCI protection based on voltage rating in addition to the ampere rating as we have historically seen in the NEC.

The question i have to ask is, if we have a shock hazard with 125 Volt/ 15 & 20 ampere receptacles, what is the hazard for a 250 Volt rated receptacle in a garage, bathroom w/dryer, basement w/ dryer and so on with all the locations stated in 210.8(A) residential occupancies, they are the same or higher!

Please reject the proposal to 210.8(A) and accept the NEC revision as written to assure this body recognizes the shock hazard that is present to all citizens of the State of New Hampshire. The cost is higher but the hazard has always existed and this body has approved the expansion of GFCI in the past, I hope you can keep addressing the shock hazard that are present in the home and keep the requirement in the NEC.

20-03-21

210.8(B)

This proposal to eliminate language in 210.8(B) in occupancies other than dwelling units only changes the revision of the leading paragraph but move GFCI protection backwards.

The language was to clear up what is required and in the 2017 NEC review cycle this body accepted the language which implies it addressed the safety and Cost impact during that cycle.

i would suggest this body reject the proposal due to the reduction of safety of workers in the State.

20-04-21

210.8(E)

This proposal rejects the revision to section 210.63 that would expand the GFCI protection to service outlets required for equipment that normally requires servicing. The work rules for any service worker that uses power tools requires GFCI protection for the power for that tools. This is same whether it is inside or outside.

i would recommend rejecting this proposal to 210.63

20-05-21

210.8(F)

The proposal to eliminate 210.8(F) says that the substantiation for this new requirement was not submitted and i have to disagree to this statement. Code Making Panel 2 had several Shock incidences related to a death of young male. The equipment in question is always subject to servicing and when the initial installation may be code compliant there have been many pieces of equipment that has shown compromised wiring and grounding. There should be some protection for the homeowner to assure the shock hazard is monitored and mitigated.

20-06-21

210.12

i don't where to start, this body should control the requirements in the Electrical Code and not rely on whatever is assumed as the intent of the Statute regarding ARC Fault Circuit Interrupters (AFCI).

SB 135 was not addressed in the State Legislature in Good Faith. I was around when this was put into effect and I remember very well a legislator saying that the Bill would be pulled if the Review Board adopted the exact same language in the Regulations, which you did!

The expansion of AFCI and the reporting of the AFCI trouble over the past few years has been very low based on the number of AFCI that have been installed since the regulation went into effect. There seems to be a break in the chain of follow up with the reporting site, electrical board and the manufacturers. This needs to be addressed more closely and maybe the Mfg. can have the ability to go in and help resolve the low number of issues that have been reported. There is no avenue for the Mfg. to go into a dwelling if the homeowner chooses not to allow them in.

I would suggest you reject the proposal and expand AFCI protection in the areas stated in the 2020 NEC. This provides life safety using technology to recognize arcing from circuits due to many reasons over the lifetime of the circuit. This

technology provides a proven method of detecting electrical arcing fire ignition sources before they reach critical energy levels to start a fire.

20-07-21

210.52 (C)**

This proposal did not have the correct reference in the actual text it should read 210.52 not 406.5

Although I appreciate the input from the previous Chair of CMP2 I think the CMP did try to address the need for more outlets on a long island or long peninsular.

i have no other comment

20-08-21

210.63

This proposal for 210.63(B)2 should be rejected as it was clearly written to prohibit the connection of the service outlet to the branch circuits that feed the unit to be serviced. This is written so your plug is off when you are servicing the equipment. Makes sense and does not lead to confusion.

20-09-21

230.67

Surge Protection is just another safety item that addresses the protection of all the electronic safety equipment we have in our homes, GFCIs, AFCI, Smoke and Fire Systems, etc. The NEC has expanded the use of Surge Protective Devices (SPDs) in other life safety systems, this is just a natural expansion which a homeowner can choose the level of protection that would be based on an hazard evaluation.

SPDs do not only protect against lightning (35-40%) but other transients that may be internal to a dwelling, Utilities, etc.

i would recommend accepting the NEC revision and require contractors to work with the homeowners and determine what would be the best fit for the dwelling.

20-11-21

314.27

the cost factor stated is excessively high for a lighting location. Fan boxes are installed very similarly to standard boxes and the cost is not as high as mentioned in the substantiation.

when you rely on the third wire as in the 2017 NEC, you do not take into account that a majority of fans do not use three wires anymore but through innovation they are wirelessly controlled and use only two wires. the minimum you will see in any box that has room to install a paddle fan.

20-13-21

406.12

There is justification to the expansion of Tamper Resistant Receptacles in these locations. Awaiting area are just that in bus stations, trains station or the like. areas where kids are present. There seems to be no confusion in this application throughout the country and to leave these hazards exposed for citizens of New Hampshire would be an error and mistake.

The comment of cruel and unusual punishment for assisted living facilities is a complete misunderstanding of the product standard. All TR receptacles are tested to assure the pressure to move the barriers of live parts is the same pressure one must apply to insert the plug into the receptacle without TR barriers. These facilities are also a common place for Grandkids to visit and have access to the same hazard they face in their own homes. Please reject this proposal.

20-14-21

422.5

I believe if the Board looks at the appliances that would require GFCI protection you will understand why.

Outdoor stations that provide Air and vacuum services, drinking water coolers, spray washing equipment, Vending machines, sump pumps and Dishwashers.

You can see that all of these are either associated with Water or Outdoor use or Both! and some are primarily used by the public. are we here to protect the public to equipment that may expose an electrical hazard?

Please reconsider this proposal and accept the language in the 2020 NEC as written.

20-15-21

422.16

Cords are not designed to be run through walls.

They must be protected.

Because this was overlooked for years, a 50-cent part is a small price to pay to protect the wiring methods allowed for Dish Washers.

Please reject this proposal and accept the 2020 NEC language. Require the right protection.

20-17-21

450.9

This signage that the 2020 NEC will require will address the long-standing violation that nearly every transformer installed on the floor of a facility has, Things piled on top of it.

Transformers are hot, Transformer need to breath to cool off. Trapping heat by placing things on top creates a situation that overheats the transformer, leaving you with two hazard, product failure and fire hazards.

the product standard does not call for this label and to rely on all manufacturers to abide by the label will limit the choices to those companies that might choose to add the label and those that do not, thereby limiting the commerce of product choices. and possibly driving cost up for the consumers.

this is an installation standard, the installer must verify that the warning labels that notify the end-user are in placed correctly and should be in control of their placement. I repeat this will be voluntary to the MFG and the 2020 NEC will assure the label is correctly applied by the installer.

I also think the cost of the label per unit is exaggerated tenfold!

Please reject this proposal.

20-18-21

680.4

Although it seems like a stretch, I do believe future versions of the International Swimming Pool and Spa Code (ISPSC) will be addressing this issue regarding

regular pool inspections also, similar to other States as they address public pool and electrical safety around them.